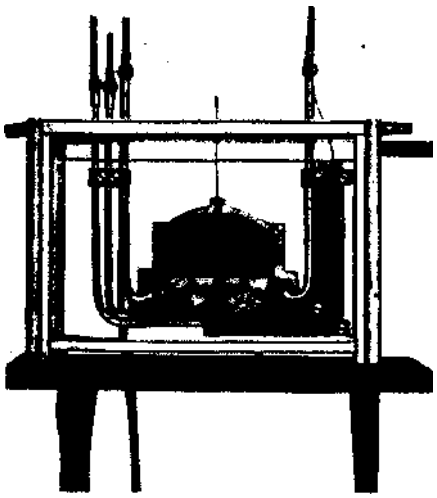
while the temperature at the solo is less than that which exists
immediately below the roof of the kiln.

Note by /ra//,.s7<7/or.—A considerable portion of the equalization of the heat in the updraft kiln is due to conduction of the heat, through the kiln structure and the brick set iu the kiln. This heat is carried downward in this manner and imparted to the cooler layers of j^aseH at the bottom of the kiln, healing them and promoting eddy currents. The updraft kiln, however, heats very slowly at the bottom, and the upper portion of the sotting will he overburned while the lower portion is underburned. As compared with the downdmft kiln, the updraft kiln consumes a larger amount of fuel per unit of output, and requires a longer time to complete a kiln round.

Direct or updraft brick kilns were the only ones built up to about twenty years ago. They are still found in many potteries,



FHJ. 4.

as in the works of Korniloff Brothers, at Petrognul. A brie.k kiln of this type is still in use at the Oboukoff works, and it is only a short (line since one* was in use at the Poutiloff works. These arc not the last updraft kilns in use, but most of thorn have been replaced *by downdraft* kilns.

tiecond Experiment.—VonimMud study of updraft kiln. Method of operating downdraft kiln. For this experiment the smoke hole at the top of the kiln is completely closed. The; chimney of the apparatus, as shown in Fig. 4, is filled with kerosene, which